



GENERAL NOTES

BID ITEM SHALL BE TUBULAR RAILING, TYPE "H" WHICH INCLUDES ALL ITEMS SHOWN.

THE SHANK AND ROOT DIAMETER OF THREAD FOR ANCHOR BOLTS SHALL BE A MIN. OF $\frac{5}{8}$ ".

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM A307. IF A307 IS USED ELECTRO-GALVANIZE NUTS, WASHERS & TOP 3 1/2" OF ANCHOR BOLTS.

CLOSURE ENDS ON STEEL RAILING SHALL BE 1/8" PLATE.
WELD AND GRIND SMOOTH.

RAILINGS SHALL BE FABRICATED IN 2 AND 3 PANEL LENGTHS.

RAILING POSTS SHALL BE SET NORMAL TO GRADE LINE.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY
ALONG CENTERLINE OF THE POST BASE.

SHIMS SHALL BE USED UNDER POSTS AND END PLATES
WHERE REQ'D. FOR ALIGNMENT.

FILL ALL EXPOSED OPENINGS BETWEEN SHIMS AND POST ANCHOR BOLT HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAILS, POSTS & SHIMS SHALL BE MADE FROM MATERIALS
CONFORMING TO A.S.T.M. DESIGNATION A709, GRADE 36.

ALL MATERIALS, EXCEPT ANCHORAGES, SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

RAILS SHALL BE BUILT STRAIGHT AND SPRUNG INTO PLACE FOR STRUCTURES CURVED UP TO 3°. FOR STRUCTURES CURVED GREATER THAN 3°, RAILS SHALL BE CURVED TO FIT.

LEGEND

- $\frac{5}{16}$ " x $\frac{3}{8}$ " WELDED STUDS
 ⬡ 3" ϕ STD. PIPE x 1'-10" LONG
 □ 3" ϕ EXTRA STRONG PIPE x 1'-10" LONG
 △ $\frac{1}{2}$ " ϕ WELD BEADS AT 1/3 PTS. ON PIPE
 11" CIRCUMF. GRIND BEADS SO THAT
 SLEEVE FITS FREELY IN THE I.D. OF 4"
 EXTRA STRONG PIPE.

<p align="center">TUBULAR RAILING TYPE 'H' (STEEL)</p>	
<p align="center">STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DEVELOPMENT SECTION</p>	
<p>APPROVED: _____</p>	<p>DATE: _____ 1/03</p>